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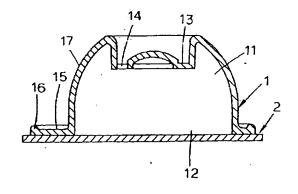
(54)【発明の名称】 電子レンジ室内清掃具

(57)【要約】

(修正有)

【課題】 レンジ室内の隅々まで能率良く清掃ができるところの電子レンジ室内清掃具の提供。

【解決手段】 掌で握るように形成した中空膨出形態の把持部11の底面を鍔15付きの開口部12とするとともに、把持部11の壁部に底面に向かって注入用凹部13を形成し、該注入用凹部13の底に、水溶液の発散口を兼わる注入口14の一個又は複数個を形成した耐熱性部材からなる作業用把持体1 と、該作業用把持体1 の前記底面に、電子レンジ室内での電子熱発散によって、洗浄、殺菌、消臭、抗菌、防汚のいずれか一つ又は複数の作用を高める水溶液を含浸、浸透させるところの、少なくとも片面を平面に形成した摺擦部材2 とからなり、該摺擦部材2 を前記作業用把持体1 の底面に接着固定した。



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【特許請求の範囲】

【請求項1】 掌で握るように形成した中空膨出形態の 把持部(11)の底面を鍔(15)付きの開口部(12)とするとと もに、把持部(11)の壁部に底面に向かって注入用凹部(1 3)を形成し、該注入用凹部(13)の底に、水溶液の発散口 を兼ねる注入口(14)の一個又は複数個を形成した耐熱性 部材からなる作業用把持体(1)と、

該作業用把持体(1) の前記底面に、電子レンジ室内での電子熱発散によって、洗浄、殺菌、消臭、抗菌、防汚のいずれか一つ又は複数の作用を高める水溶液を含浸、浸透、拡散させるところの、少なくとも片面を平面に形成した摺擦部材(2) とからなり、

該摺擦部材(2)を前記作業用把持体(1)の底面に結合固定または交換自在に結合固定したことを特徴とする電子レンジ室内清掃具。

【請求項2】 作業用把持体(1)の底面輪郭形状を、半径の小さい曲線と半径の大きい曲線との連続で形成される輪郭線で形成するとともに、鍔(15)の上面外周縁部に隆起縁(16)を形成したことを特徴とする請求項1記載の電子レンジ室内清掃具。

【請求項3】 摺擦部材(2) の形状を、鍔(15)付きの開口部(12)の輪郭形状と相似形の輪郭形状であって緑の変形により鍔(15)付きの開口部(12)の鍔(15)上に至らないサイズとしたことを特徴とする請求項1又は2記載の電子レンジ室内清掃具。

【請求項4】 摺擦部材(2) に含浸、浸透させる水溶液 として、洗剤、抗菌剤、耐熱性防汚剤、香料を混合した ものを使用する請求項1、2又は3記載の電子レンジ室 内清掃具。

【請求項5】 水溶液成分の内、洗剤として蔗糖脂肪酸エステル、耐熱用防汚剤としてシリコン樹脂、抗菌剤としてソルビン酸カリウム、香料として食品香料を用いたことを特徴とする請求項4記載の電子レンジ室内清掃具。

【発明の詳細な説明】

[0001]

【発明の属する技術分野】本願発明は、電子レンジ室内 の清掃、殺菌、消臭、抗菌、防汚を目的として使用する 電子レンジ室内清掃具に関する。

[0002]

【従来の技術】従来における電子レンジ室内(以下、レンジ室内という)の清掃は、極普通の手段として慣用されている、流動パラフィン、洗剤等を含ませた紙、布巾、布帛等で摺擦して、室内の汚れの除去を行うようにした手段が実施されている。

[0003]

【発明が解決しようとする課題】ところが、流動パラフィン、洗剤等を含ませた紙、布巾、布帛等で摺擦して行うレンジ室内の消掃は、その後に、水、湯で湿らせた布巾等で、再度レンジ室内を払拭して残存する洗剤等を除

去する必要がある。このため、身近に有る紙、布巾、布 帛等と洗剤が使用できることから、わざわざ専用のレン シ清掃具を購入する必要が無い点において経済的であ る。しかし、前記したような作業手順が必要であること から作業性が悪い上に、直接又は手袋生地を介して指先 で布巾等を押えたり包んだりしながらレンジ室内面を払 拭するために、指先、爪の保護に問題があり、場合によっては指先、爪を痛めたり、布巾の屑や洗剤が付着残存 によるおそれがある。しかも、単なる洗剤含浸による布 巾清掃であることから隅々まで十分できないことから、 雑菌の繁殖防止が完全でなく、またレンジ室内に残存す る悪具を消去することができないといった点に問題があった。

【0004】本発明は、良好な清掃作業性の確保と安全性及びレンジ室内の損傷を招くことなく、また単に汚れを落とすのみでなく、除菌、抗菌、消臭、防汚効果が得られ、レンジ室内の隅々まで能率良く清掃ができるところの電子レンジ室内清掃具の提供を課題とする。

[0005]

【課題を解決するための手段】本発明は上記課題を達成するものであって、掌で握るように形成した中空膨出形態の把持部(11)の底面を鍔(15)付きの開口部(12)とするとともに、把持部(11)の壁部に底面に向かって注入用凹部(13)を形成し、該注入用凹部(13)の底に、水溶液の発散口を兼ねる注入口(14)の一個又は複数個を形成した耐熱性部材からなる作業用把持体(1)と、該作業用把持体(1)の前記底面に、電子レンジ室内での電子熱発散によって、洗浄、殺菌、消臭、抗菌、防汚のいずれか一つ又は複数の作用を高める水溶液を、毛細管現象等によっては複数の作用を高める水溶液を、毛細管現象等によっては複数の作用を高める水溶液を、毛細管現象等によっては複数の作用を高める水溶液を、毛細管現象等によってを浸、透透、拡散させるところの、少なくとも片面を平面に形成した摺擦部材(2)とからなり、該摺擦部材(2)を前記作業用把持体(1)の底面に接着固定または交換自在に結合固定したことを特徴とする電子レンジ室内清掃具を要旨とする。

(0006)

【発明の効果】上記のように構成した電子レンジ室内清掃具には、洗浄、殺菌、消臭、抗菌、防汚のいずれか一つ又は複数の作用を高める水溶液をセットしてあり、これを把持部(11)の注入口(14)から注入して摺擦部材(2)に含浸、浸透、拡散させた状態においてレンジ室内に載置し、80~100℃程度に加熱した後、把持部(11)を手で握ってレンジ室内の壁面等を摺擦するのであるが、前記加熱によって、摺擦部材(2)に含浸、浸透させた薬剤が発散して注入口(14)を発散口としてレンジ室内に発散するとともに、薬液が温まって付着物の膨潤軟化を促進することが相乗的に作用して、付着物の除去と汚れを効果的に清掃することができ、また殺菌、消臭、抗菌、防汚効果を高めることができる。

【0007】また清掃作業においては、作業用把持体 (1) が、掌で握るように形成した中空膨出形態の把持部 (11)の底面を鍔(15)付きの開口部(12)とするとともに、把持部(11)の壁部に底面に向かって注入用凹部(13)を形成し、該注入用凹部(13)の底に、水溶液の発散口を兼ねる注入口(14)の一個又は複数個を形成した耐熱性部材から形成していることから、作業用把持体(1)は直接的には加熱されず、摺擦部材(2)からの熱伝導であるから、余り温度が上昇せず作業者が火傷を負うようなことも、また把持部(11)が破損されるようなことも無い。しかも把持部(11)を握って、レンジ室内の汚れに応じた加減しながらの力で摺擦部材(2)を汚れ面に押圧することがあること、及び鍔(15)が指先の保護機能と部材補強機能を果たして安全性を高めることから、一般的に実施されている従来の布巾、布帛等を使用する場合に比べ、効率的な力の作用によって軽快且つ安全にしかも能率的にレンジ室内を清掃し衛生を確保することができる。

【0008】さらに、把持部(11)の壁部に底面に向かって注入用凹部(13)を形成し、該注入用凹部(13)の底に、水溶液の発散口を兼ねる注入口(14)の一個又は複数個を形成することによって、水溶液を一気に注入するようなことがあっても、注入用凹部(13)に溜るようになって、把持部(11)の外表面に溢れることがなく、適度に摺擦部材(2)上へ分散滴下して吸収拡散され、溢れた水溶液が学へ付着する不快感と付着した場合に生じる滑りもなく、しっかりと把持部(11)を把持して作業をすることができる。

【0009】特に請求項2に記載したように前記作業用把持体(1)の底面輪郭形状を、半径の小さい曲線と半径の大きい曲線との連続で形成される輪郭線で形成するとともに、鍔(15)の上面外周縁部に隆起線(16)を形成する場合においては、レンジ室内の平面はもちろん、小さい曲率半径の凹曲面や平面に沿う曲面に対応できる曲面も摺擦部材(2)で清掃することができる。

【0010】また請求項3に記載のように摺擦部材(2)の形状を、鍔(15)付きの開口部(12)の輪郭形状と相似形の輪郭形状であって縁の変形により鍔(15)付きの開口部(12)の鍔(15)上に至らないサイズとした場合には、鍔(15)付きの開口部(12)の輪郭縁部からはみ出した摺擦部材(2)の縁部を、清掃面に対応して変形密着させることができるとともに、把持部(11)を握った場合に指先へ摺擦部材(2)が接触することがなくなり、手指の汚れを防止するようになるとともに、摺擦部材(2)のはみ出し部分によって鍔(15)のレンジ室内壁面への衝突を防止して、室内壁面の損傷を回避することができる。

【0011】さらに請求項4に記載のように、摺擦部材(2)に含没、浸透させる水溶液として、洗剤、抗菌剤、耐熱性防汚剤、香料を混合したものを使用することによって、レンジ室内の清掃が必要となった場合に応じて、把持部(11)に設けた注入口(14)から水溶液を注入し、摺擦部材(2)に含浸、浸透、拡散させて使用できることから、水溶液の経済的使用が可能となるとともに、レンジ

室内の清掃、殺菌、消臭、抗菌、防汚効果を、高い安全性を確保して達成することが可能となる。

【0012】また請求項5に記載のように水溶液成分の内、洗剤として蔗糖脂肪酸エステル、耐熱用防汚剤としてシリコン樹脂、抗菌剤としてソルビン酸カリウムを用いることによって、水溶液使用による安全性を一段と高くすることができる。

[0013]

【発明の実施の形態】及び

【実施例】本発明の実施例に係る電子レンジ室内清掃具は、図1の正面図、図2の平面図、図3の図2におけるA-A線断面図に示すように、120℃の温度に耐える耐熱性を有し安価な熱可塑性合成倒脂部材である、ポリエチレン、ポリスチロールポリスチレン、ポリプロピレン、アクリル等の中から択一的にポリプロピレンを選択使用した作業用把持体(1)と、綿、羊毛等の天然繊維又はアクリル、ナイロン等程度の耐熱性合成樹脂繊維からなる厚み5㎜の摺擦部材(2)とから構成されている。

【0014】前記作業用把持体(1)は、掌で握持して滑ることなく扱えるように、直径55mであってその最大直径部側を開口させ、表面には二面金型で成形できる滑止用稜線(17)の多数本を形成した中空半球形状の把持部(11)と、該把持部(11)を伏せた状態における頂部に内径25mm、深さ10mmの凹みの底の同一半径中心円上に、水溶液の発散口を兼ねる三個の弧状長孔からなる注入口(14)を均等間隔で設けた注入用凹部(13)と、前記把持部(11)の開口部(12)外周に、半径20mmの小さい三つの曲線相互を半径65mmの大きい曲線で繋いでおむすび形の輪郭形状であり、該輪郭外周縁に沿って上方突出する隆起縁(16)を形成した鍔(15)とを、射出成形手段により一体形成した構成とする。

【0015】また摺擦部材(2) は、電子レンジ室内での電子熱発散によって、洗浄、殺菌、消臭、抗菌、防汚作用を発揮するところの水溶液を、含浸、浸透させるために、既述したように天然繊維又は耐熱性の合成樹脂繊維から成り、前記作業用把持体(1) の鍔(15)の輪郭サイズよりも6mm大きい相似形状に製作された構成である。

【0016】そして摺擦部材(2) は、前記作業用把持体(1)の底面を粗面として接着面積を大きくして、同心的に密着させ接着剤を用いて接着され一体に結合する。

【0017】なお、鍔(15)及び摺擦部材(2)の輪郭形状は、前記おむすび形に限定されるものではなく、半径の小さい曲線と半径の大きい曲線との連続で形成される輪郭線で形成される形状であれば、対象形状の多角形の他、瓢箪形状等の異形のものであってもよく、また前記作業用周設体の把持部(11)の表面には、半径の小さい曲線部分に向かって突出する握持方向性を決めるための方向決定用凹凸のいずれかを形成して、掌、指の感触によって方向性が認識できるようにし、半径の小さい摺擦部分又は半径の大きい摺擦部分が作業中に自視確認するこ

となく適宜方向を変更させて、レンジ室内の隅々まで清掃できるようにする場合もある。

【0018】また前記摺擦部材(2) は、作業用把持体(1) に対して交換自在とすることによって、摺擦部材(2) の洗浄による繰り返し使用と、作業用把持体(1) の継続的使用が可能となって、不燃ゴミの発生を極力少なくし且つ資源の節約を行うことができる。

【0019】その交換手段については図示を省略したが、鍔(15)部の裏面に係着用突起を形成し、一方摺擦部材(2)の表面の前記係着用突起の対応する位置に係着用溝を形成して、これら係着用突起と係着用溝とを部分的に接着剤を使用又は使用せずに係合する手段、鍔(15)の裏面と摺擦部材(2)の相互に係着離脱可能なベルベットファスナーを部分的に使用して脱着する手段、摺擦部材(2)の周縁部を鍔(15)の隆起縁(16)側へ折り返して、該折り返し部を隆起縁(16)の内側へ脱着自在に嵌合できる止めリングで挟着する手段等によって行うことが考えられる。

【0020】前記止めリングによる挟着手段を採用する場合には、摺擦部材(2) は2~3㎜程度の不織布、柔軟性のある紙部材(水溶液の含浸、浸透機能を有するものに限る)等の薄いものを用いることが好ましい。

【0021】次に、摺擦部材(2)に含浸、浸透させる水溶液について説明すると、該水溶液は、電子レンジ室内での電子熱発散によって、洗浄、殺菌、消臭、抗菌、防汚作用を最大限発揮するところ、洗剤、抗菌剤、耐熱性防汚剤、香料を水に混合したものであり、好ましくは、洗剤として蔗糖脂肪酸エステル、耐熱用防汚剤としてシリコン樹脂、抗菌剤としてソルビン酸カリウム、消臭剤としてシソ油或は消臭剤の代わりに、香料としてアルコール、グリコール類の水溶液等の食品香料の僅かを用い

る.

【0022】本願実施例において使用した水溶液は、全体を100部とした場合において、水93.1部に対して、洗剤として蔗糖脂肪酸エステルを5部、耐熱性防汚剤としてシリコン樹脂0.5部、抗菌剤としてソルビン酸カリウムを0.1部、消臭剤としてシソ油を0.5部混合したものである。

【0023】尚、上記配合比率の部数は、若干の変更をした場合においても、本願発明の効果を発揮することが可能であることは勿論、各成分においては、人体及び熱に対する安全性を有するものであれば、特に限定するものではなく、例えば抗菌剤としてはデヒドロ酢酸ソーダ、安息香酸ソーダ、その他公知の抗菌剤を用いることも可能である。

【図面の簡単な説明】

【図1】本発明の実施例に係る電子レンジ室内清掃具の 正面図である。

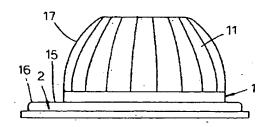
【図2】本発明の実施例に係る電子レンジ室内清掃具の 平面図である。

【図3】図2のA-A線における断面図である。

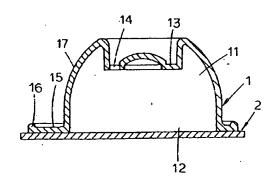
【符号の説明】

- (1) 作業用把持体
- (11) 把持部
- (12) 開口部
- (13) 注入用凹部
- (14) 注入口
- (15) 銷
- (16) 隆起縁
- (17) 稜線
- (2) 摺擦部材

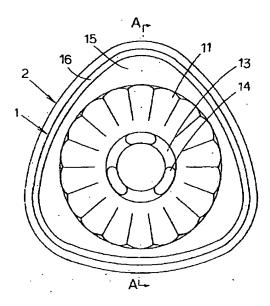
[図1]



【図3】



[図2]



CLEANER FOR CLEANING MICROWAVE OVEN CHAMBER INSIDE

Patent number:

JP10229963

Publication date:

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Inventor:

TANDAI AKIRA; TABITA SADAKATSU

Applicant:

KING KAGAKU KK

Classification:

- international:

A47L17/00; A47L13/26

- european:

Application number:

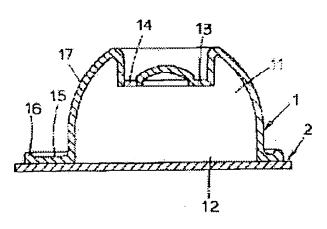
JP19970034008 19970218

Priority number(s):

Report a data error here

Abstract of JP10229963

PROBLEM TO BE SOLVED: To provide a cleaner for cleaning the microwave oven chamber inside capable of cleaning up to every corner inside an oven well efficiently. SOLUTION: This cleaner for cleaning the microwave oven chamber inside consists of an opening 12 with a flange 15 at the bottom of a holder 11 made into a hollow swollen type to be gripped by hand, a recess 13 for pouring a chemical cleanser made toward the wall bottom of the holder 11, a holder main for work 1 made of a heat-resisting material forming one or more pouring ports in a dual service for spraying out a water solution on the bottom of the recess 13 for pouring, and a scrubber 2 made on the bottom of the holder main for work 1 in flat at least at one side impregnated/permeated with a water solution to enhance any one or a plurality of actions of cleaning, sterilization, deodorization, antibacteria; and anti-contamination. The scrubber 2 is then bond-fixed to the bottom of the holder main for work 1.



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CLEANER FOR CLEANING MICROWAVE OVEN CHAMBER INSIDE

Bibliograpl data	nic Description Claims <u>Mosaics</u>	Onginal document	INPADOC legal status
Patent number: Publication date:	JP10229963 1998-09-02		
inventor: Applicant:	TANDAI AKIRA, TABITA SADAKATSU KING KAGAKU KK		
Classification:			
international: european:	A47L17/00; A47L13/26		
Application number	: JP19970034008 19970218		

Publication info: JP3295802B2 B2 - 2002-06-24 JP10229963 A - 1998-09-02

TECHNICAL FIELD

[Field of the Invention] The invention in this application relates to the microwave oven indoor cleaning implement used for the purpose of cleaning of the microwave oven interior of a room, sterilization, deodorization, antibacterial, and antifouling.

PRIOR ART

[Description of the Prior Art] cleaning of the microwave oven interior of a room (henceforth the range interior of a room) in the former -- a pole -- rubbing is carried out by the paper which is commonly used as an ordinary means and in which the liquid paraffin, the detergent, etc. were included, the dishcloth, a textile, etc., and the means which was made to remove indoor dirt is carried out

EFFECT OF THE INVENTION

[Effect of the Invention] In the microwave oven indoor cleaning implement constituted as mentioned above The water solution which raises any one or two or more operations of washing, sterilization, deodorization, antibacterial, and antifouling is set. This is poured in from the inlet (14) of the grasping section (11), and it is a rubbing member (2). Although the grasping section (11) is grasped by hand and rubbing of the wall surface of the range interior of a room etc. is carried out after laying in the range interior of a room in the condition that you made it sunk in, permeated and spread and heating at about 80-100 degrees C By said heating, it is a rubbing member (2). While the drugs made to sink in and permeate emit and emitting to the range interior of a room by using an inlet (14) as

emission opening A drug solution getting warm and promoting swelling softening of an affix can act in multiplication, and removal and dirt of an affix can be cleaned effectively, and sterilization, deodorization, antibacterial, and the antifouling effectiveness can be heightened.

[0007] Moreover, it sets to cleaning and is a working-level month grasping object (1). While using as opening (12) with a collar (15) the base of the grasping section (11) of the hollow bulge gestalt formed so that it might grasp in the palm The crevice for impregnation (13) is formed in the wall of the grasping section (11) toward a base. From forming from the heat-resistant member in which the piece or plurality of an inlet (14) which serves as emission opening of a water solution was formed at the bottom of this crevice for impregnation (13) working-level month grasping object (1) it heats directly -not having -- rubbing member (2) from -- as [damage / since it is heat conduction / the grasping section (11) also so that temperature may seldom rise but an operator may get injured] And it is a rubbing member (2) at the force while grasping the grasping section (11) and adjusting according to the dirt of the range interior of a room. It can press to a dirt side, And compared with the case where a collar (15) uses the conventional dishcloth, a textile, etc. which are generally carried out from raising safety sure enough in the protection feature and member reinforcement function of a fingertip, according to an operation of the efficient force, the range interior of a room can be cleaned lightly efficiently moreover safely, and health can be secured.

[0008] Furthermore, by forming the crevice for impregnation (13) in the wall of the grasping section (11) toward a base, and forming in the bottom of this crevice for impregnation (13) the piece or plurality of an inlet (14) which serves as emission opening of a water solution Even if it may pour in a water solution at a stretch, the crevice for impregnation (13) comes to be covered. It is not full of the outside surface of the grasping section (11), and is a rubbing member (2) moderately. Distributed dropping is turned up, and absorption diffusion is carried out, and there is also no slipping produced when the overflowing water solution adheres with the displeasure adhering to a palm, and it can work by grasping the grasping section (11) firmly.

[0009] As indicated especially to claim 2, it is said working-level month grasping object (1). While forming a base profile configuration with the border line formed by continuation on a curve with a small radius, and a curve with a large radius The curved surface which can be equivalent to the curved surface which meets the concave bend side and flat surface of small radius of curvature as well as the flat surface of the range interior of a room when forming an upheaval edge (16) in the top-face periphery edge of a collar (15) is also a rubbing member (2). It can clean.

[0010] Moreover, it is a rubbing member (2) like the publication to claim 3. When a configuration is made into the size which are the profile configuration of opening (12) with a collar (15), and the profile configuration of an analog, and does not result on the collar (15) of opening (12) with a collar (15) according to deformation of an edge Collar (15) Rubbing member overflowing from the profile edge of opening (12) of a with (2) While being able to carry out deformation adhesion of the edge corresponding to a cleaning side When the grasping section (11) is grasped, it is a rubbing member (2) to a fingertip. While contacting is lost and coming to prevent the dirt of a finger, it is a rubbing member (2). By the flash part, the collision to the range indoor wall surface of a collar (15) can be prevented, and damage on an indoor wall surface can be avoided.

[0011] Still like the publication to claim 4, it is a rubbing member (2). By using what mixed a detergent, an antimicrobial agent, a heat-resistant stain proofing agent, and perfume as a water solution made to sink in and permeate According to the case where cleaning of the range interior of a room is needed, a water solution is poured in from the inlet (14) established in the grasping section (11), and it is a rubbing member (2). Since it can be used making it sunk in, permeated and spread, while the economization of a water solution becomes possible It becomes possible to secure high safety and to attain cleaning of the range interior of a room, sterilization, deodorization, antibacterial, and the antifouling effectiveness.

[0012] Moreover, the safety by water-solution use can be made high much more by [according to claim 5] using silicon resin as a sucrose fatty acid ester and a stain proofing agent for heatproofs, and using sorbic acid potassium salt as an antimicrobial agent as a detergent, among water-solution components, like.
[0013]

[Embodiment of the Invention] It reaches.

TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] However, after that, cleaning of the range interior of a room performed by carrying out rubbing by the paper in which the liquid paraffin, the detergent, etc. were included, the dishcloth, a textile, etc. is the dishcloth made to become wet with water and a molten bath, and needs to remove the detergent which wipes away the range interior of a room again, and remains. For this reason, in a point without the need of purchasing the range cleaning implement of dedication specially from the ability of the paper which exists close, a dishcloth, a textile, etc. and a detergent being used, it is economical. however, the top where workability is bad since said work habits which were carried out are required -- direct or a glove -- in order to wipe away a range indoor side, pressing down a dishcloth etc., wrapping or carrying out by the fingertip through the ground, a problem is in protection of a fingertip and a pawl, a fingertip and a pawl are damaged depending on the case, or there is fear according [waste or the detergent of a dishcloth] to adhesion survival. And since it was dishcloth cleaning by mere detergent sinking in and could not do enough to all the corners, propagation prevention of saprophytic bacteria was not perfect, and the problem was in the point that the offensive odor which remains in the range interior of a room is not eliminable.

[0004] Without causing reservation and safety of good cleaning workability, and the damage on the range interior of a room, disinfection, antibacterial, deodorization, and the antifouling effectiveness are acquired and it this invention not only removes dirt, but offers a technical problem the microwave oven indoor cleaning implement which cleaning can improve efficiency to all the corners of the range interior of a room.

MEANS

[Means for Solving the Problem] While this invention uses as opening (12) with a collar (15) the base of the grasping section (11) of the hollow bulge gestalt formed so that the above-mentioned technical problem may be attained and it might grasp in the palm working-level month grasping object (1) which consists of a heat-resistant member which

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formed the crevice for impregnation (13) in the wall of the grasping section (11) toward the base, and formed in the bottom of this crevice for impregnation (13) the piece or plurality of an inlet (14) which serves as emission opening of a water solution This working-level month grasping object (1) On said base, by the electronic heat emission in the microwave oven interior of a room The water solution which raises any one or two or more operations of washing, sterilization, deodorization, antibacterial, and antifouling rubbing member (2) in which at least one side permeated [is sunk in and] and diffused by capillarity etc. was formed at the flat surface It becomes. from -- This rubbing member (2) Said working-level month grasping object (1) Let the microwave oven indoor cleaning implement characterized by enabling joint immobilization of adhesion immobilization or exchange with a base be a summary.

EXAMPLE

[Example] The microwave oven indoor cleaning implement concerning the example of this invention As shown in the front view of <u>drawing 1</u>, the top view of <u>drawing 2</u>, and the A-A line sectional view in <u>drawing 2</u> of <u>drawing 3</u> It has the thermal resistance which bears the temperature of 120 degrees C, and is a cheap thermoplastic synthetic-resin member. working-level month grasping object (1) which carried out selection use of the polypropylene alternatively out of polyethylene, polystyrol polystyrene, polypropylene, an acrylic, etc. rubbing member (2) with a thickness of 5mm it is thin from the heat-resistant plastic fiber of extent, such as natural fibers, such as cotton and wool, or an acrylic, and nylon, from -- it is constituted.

[0014] Said working-level month grasping object (1) So that it can treat without supporting in the palm and sliding The grasping section of the hollow semi-sphere configuration which is 55mm in diameter, was made to carry out opening of the maximum direct diameter side, and formed in the front face the a large number book of the ridgeline for **** (17) which can be fabricated with second page metal mold (11), The crevice for impregnation which prepared the inlet (14) which consists of three arc long holes which serve as emission opening of a water solution at equal spacing at the crowning in the condition of having turned down this grasping section (11) on the same radius center circle with a bore [of 25mm], and a depth of 10mm of the bottom of a depression (13), Curvilinear [with a radius of 20mm / small / three / both] is connected with the opening (12) periphery of said grasping section (11) with a large curve with a radius of 65mm, and it is the profile configuration of the conclusion form. The collar (15) in which the upheaval edge (16) which carries out an upper part protrusion along this profile periphery edge was formed is considered as the configuration really formed with the injection-molding means.

[0015] moreover, rubbing member (2) in order to sink in and to make the water solution which demonstrates washing, sterilization, deodorization, antibacterial, and an antifouling operation permeate by the electronic heat emission in the microwave oven interior of a room, it mentioned already -- as -- from a natural fiber or heat-resistant plastic fiber -- changing -- said working-level month grasping object (1) an analog larger 6mm than the profile size of a collar (15) -- it is the configuration manufactured by the **.

[0016] And rubbing member (2) Said working-level month grasping object (1) Enlarge adhesion area by making a base into a split face, and it is made to stick in the said

alignment, pastes up using adhesives, and combines with one.

[0017] In addition, a collar (15) and a rubbing member (2) A profile configuration If it is the configuration formed not with the thing limited to the aforementioned conclusion form but with the border line formed by continuation on a curve with a small radius, and a curve with a large radius You may be variant things, such as a gourd configuration besides the polygon of an object configuration. In the front face of the grasping section (11) of said working-level month attachment object Either of the irregularity for direction decision for deciding the support directivity which projects toward a curvilinear part with a small radius is formed. A direction is made to change suitably, without enabling it to recognize directivity, and inspecting visually by the feel of a palm and a finger, while a rubbing part with a small radius or a rubbing part with a large radius works, and it is made to be able to clean to all the corners of the range interior of a room.

[0018] Moreover, said rubbing member (2) Working-level month grasping object (1) By receiving and making exchange free, it is a rubbing member (2). The report use by

[0018] Moreover, said rubbing member (2) Working-level month grasping object (1) By receiving and making exchange free, it is a rubbing member (2). The repeat use by washing, and working-level month grasping object (1) Continuous use can be attained, and generating of nonflammable dust can be lessened as much as possible, and a resource can be saved.

[0019] Although illustration was omitted about the exchange means The projection for engagement is formed in the rear face of the collar (15) section, and, on the other hand, it is a rubbing member (2). The slot for engagement is formed in the location where said surface projection for engagement corresponds. A means by which the projection for these engagement and the slot for engagement are partially engaged in adhesives, without using or using it, The rear face and rubbing member (2) of a collar (15) The means and rubbing member (2) which carry out desorption mutually, using partially the velvet fastener in which engagement balking is possible The periphery section is turned up to the upheaval edge (16) side of a collar (15). It is possible to carry out with a means to fasten this clinch section in the stop ring which can fit in free [desorption] to the inside of an upheaval edge (16) etc.

[0020] When adopting the fastening means by said stop ring, it is a rubbing member (2). It is desirable to use what has a thin paper member (it restricts to what has to sink [of a water solution] in and an osmosis function) with an about 2-3mm nonwoven fabric and flexibility etc.

[0021] Next, rubbing member (2) When the water solution made to sink in and permeate is explained, this water solution By the electronic heat emission in the microwave oven interior of a room, washing, sterilization, deodorization, antibacterial, A detergent, an antimicrobial agent, a heat-resistant stain proofing agent, and perfume are mixed in water the place which carries out the maximum exertion of the antifouling operation. Preferably It uses [of food flavors, such as a water solution of alcohol and glycols,] as a detergent whether it is small as perfume instead of a beefsteak plant oil or a deodorant as sorbic acid potassium salt and a deodorant as silicon resin and an antimicrobial agent as a sucrose fatty acid ester and a stain proofing agent for heatproofs.

[0022] When the whole is made into the 100 sections, to the water 93.1 section, the water solution used in this application example is used as a detergent, and as the five sections and a heat-resistant stain proofing agent, sorbic acid potassium salt is mixed as the silicon resin 0.5 section and an antimicrobial agent, and it mixes the 0.5 sections of beefsteak plant oils for a sucrose fatty acid ester as the 0.1 sections and a deodorant.

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[0023] In addition, when some change is made, as for number of copies of the abovementioned rate of a compounding ratio, it is also possible it not to limit especially that it is possible to demonstrate the effectiveness of the invention in this application, and it to use dehydroacetic-acid soda, benzoic-acid soda, and other well-known antimicrobial agents as an antimicrobial agent, if it, of course, has the safety to the body and heat in each component.

DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the front view of the microwave oven indoor cleaning implement concerning the example of this invention.

[Drawing 2] It is the top view of the microwave oven indoor cleaning implement concerning the example of this invention.

[Drawing 3] It is a sectional view in the A-A line of drawing 2.

[Description of Notations]

- (1) Working-level month grasping object
- (11) Grasping section
- (12) Opening
- (13) The crevice for impregnation
- (14) Inlet
- (15) Collar
- (16) Upheaval edge
- (17) Ridgeline
- (2) Rubbing member

DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] The invention in this application relates to the microwave oven indoor cleaning implement used for the purpose of cleaning of the microwave oven interior of a room, sterilization, deodorization, antibacterial, and antifouling. [0002]

[Description of the Prior Art] cleaning of the microwave oven interior of a room (henceforth the range interior of a room) in the former -- a pole -- rubbing is carried out by the paper which is commonly used as an ordinary means and in which the liquid paraffin, the detergent, etc. were included, the dishcloth, a textile, etc., and the means which was made to remove indoor dirt is carried out.

[0003]

[Problem(s) to be Solved by the Invention] However, after that, cleaning of the range interior of a room performed by carrying out rubbing by the paper in which the liquid paraffin, the detergent, etc. were included, the dishcloth, a textile, etc. is the dishcloth

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made to become wet with water and a molten bath, and needs to remove the detergent which wipes away the range interior of a room again, and remains. For this reason, in a point without the need of purchasing the range cleaning implement of dedication specially from the ability of the paper which exists close, a dishcloth, a textile, etc. and a detergent being used, it is economical however, the top where workability is bad since said work habits which were carried out are required -- direct or a glove -- in order to wipe away a range indoor side, pressing down a dishcloth etc., wrapping or carrying out by the fingertip through the ground, a problem is in protection of a fingertip and a pawl, a fingertip and a pawl are damaged depending on the case, or there is fear according [waste or the detergent of a dishcloth] to adhesion survival. And since it was dishcloth cleaning by mere detergent sinking in and could not do enough to all the corners, propagation prevention of saprophytic bacteria was not perfect, and the problem was in the point that the offensive odor which remains in the range interior of a room is not eliminable.

[0004] Without causing reservation and safety of good cleaning workability, and the damage on the range interior of a room, disinfection, antibacterial, deodorization, and the antifouling effectiveness are acquired and it this invention not only removes dirt, but offers a technical problem the microwave oven indoor cleaning implement which cleaning can improve efficiency to all the corners of the range interior of a room.

[0005]

[Means for Solving the Problem] While this invention uses as opening (12) with a collar (15) the base of the grasping section (11) of the hollow bulge gestalt formed so that the above-mentioned technical problem may be attained and it might grasp in the palm working-level month grasping object (1) which consists of a heat-resistant member which formed the crevice for impregnation (13) in the wall of the grasping section (11) toward the base, and formed in the bottom of this crevice for impregnation (13) the piece or plurality of an inlet (14) which serves as emission opening of a water solution This working-level month grasping object (1) On said base, by the electronic heat emission in the microwave oven interior of a room The water solution which raises any one or two or more operations of washing, sterilization, deodorization, antibacterial, and antifouling rubbing member (2) in which at least one side permeated [is sunk in and] and diffused by capillarity etc. was formed at the flat surface It becomes. from -- This rubbing member (2) Said working-level month grasping object (1) Let the microwave oven indoor cleaning implement characterized by enabling joint immobilization of adhesion immobilization or exchange with a base be a summary. [0006]

[Effect of the Invention] In the microwave oven indoor cleaning implement constituted as mentioned above The water solution which raises any one or two or more operations of washing, sterilization, deodorization, antibacterial, and antifouling is set. This is poured in from the inlet (14) of the grasping section (11), and it is a rubbing member (2). Although the grasping section (11) is grasped by hand and rubbing of the wall surface of the range interior of a room etc. is carried out after laying in the range interior of a room in the condition that you made it sunk in, permeated and spread and heating at about 80-100 degrees C By said heating, it is a rubbing member (2). While the drugs made to sink in and permeate emit and emitting to the range interior of a room by using an inlet (14) as emission opening A drug solution getting warm and promoting swelling softening of an

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affix can act in multiplication, and removal and dirt of an affix can be cleaned effectively, and sterilization, deodorization, antibacterial, and the antifouling effectiveness can be heightened.

[0007] Moreover, it sets to cleaning and is a working-level month grasping object (1). While using as opening (12) with a collar (15) the base of the grasping section (11) of the hollow bulge gestalt formed so that it might grasp in the palm The crevice for impregnation (13) is formed in the wall of the grasping section (11) toward a base. From forming from the heat-resistant member in which the piece or plurality of an inlet (14) which serves as emission opening of a water solution was formed at the bottom of this crevice for impregnation (13) working-level month grasping object (1) it heats directly -not having -- rubbing member (2) from -- as [damage / since it is heat conduction / the grasping section (11) also so that temperature may seldom rise but an operator may get injured] And it is a rubbing member (2) at the force while grasping the grasping section (11) and adjusting according to the dirt of the range interior of a room. It can press to a dirt side, And compared with the case where a collar (15) uses the conventional dishcloth, a textile, etc. which are generally carried out from raising safety sure enough in the protection feature and member reinforcement function of a fingertip, according to an operation of the efficient force, the range interior of a room can be cleaned lightly efficiently moreover safely, and health can be secured.

[0008] Furthermore, by forming the crevice for impregnation (13) in the wall of the grasping section (11) toward a base, and forming in the bottom of this crevice for impregnation (13) the piece or plurality of an inlet (14) which serves as emission opening of a water solution Even if it may pour in a water solution at a stretch, the crevice for impregnation (13) comes to be covered. It is not full of the outside surface of the grasping section (11), and is a rubbing member (2) moderately. Distributed dropping is turned up, and absorption diffusion is carried out, and there is also no slipping produced when the overflowing water solution adheres with the displeasure adhering to a palm, and it can work by grasping the grasping section (11) firmly.

[0009] As indicated especially to claim 2, it is said working-level month grasping object (1). While forming a base profile configuration with the border line formed by continuation on a curve with a small radius, and a curve with a large radius The curved surface which can be equivalent to the curved surface which meets the concave bend side and flat surface of small radius of curvature as well as the flat surface of the range interior of a room when forming an upheaval edge (16) in the top-face periphery edge of a collar (15) is also a rubbing member (2). It can clean.

[0010] Moreover, it is a rubbing member (2) like the publication to claim 3. When a configuration is made into the size which are the profile configuration of opening (12) with a collar (15), and the profile configuration of an analog, and does not result on the collar (15) of opening (12) with a collar (15) according to deformation of an edge Collar (15) Rubbing member overflowing from the profile edge of opening (12) of a with (2) While being able to carry out deformation adhesion of the edge corresponding to a cleaning side When the grasping section (11) is grasped, it is a rubbing member (2) to a fingertip. While contacting is lost and coming to prevent the dirt of a finger, it is a rubbing member (2). By the flash part, the collision to the range indoor wall surface of a collar (15) can be prevented, and damage on an indoor wall surface can be avoided. [0011] Still like the publication to claim 4, it is a rubbing member (2). By using what

mixed a detergent, an antimicrobial agent, a heat-resistant stain proofing agent, and perfume as a water solution made to sink in and permeate According to the case where cleaning of the range interior of a room is needed, a water solution is poured in from the inlet (14) established in the grasping section (11), and it is a rubbing member (2). Since it can be used making it sunk in, permeated and spread, while the economization of a water solution becomes possible It becomes possible to secure high safety and to attain cleaning of the range interior of a room, sterilization, deodorization, antibacterial, and the antifouling effectiveness.

[0012] Moreover, the safety by water-solution use can be made high much more by [according to claim 5] using silicon resin as a sucrose fatty acid ester and a stain proofing agent for heatproofs, and using sorbic acid potassium salt as an antimicrobial agent as a detergent, among water-solution components, like.
[0013]

[Embodiment of the Invention] And [Example] The microwave oven indoor cleaning implement concerning the example of this invention As shown in the front view of drawing 1, the top view of drawing 2, and the A-A line sectional view in drawing 2 of drawing 3 It has the thermal resistance which bears the temperature of 120 degrees C, and is a cheap thermoplastic synthetic-resin member. working-level month grasping object (1) which carried out selection use of the polypropylene alternatively out of polyethylene. polystyrol polystyrene, polypropylene, an acrylic, etc. rubbing member (2) with a thickness of 5mm it is thin from the heat-resistant plastic fiber of extent, such as natural fibers, such as cotton and wool, or an acrylic, and nylon, from -- it is constituted. [0014] Said working-level month grasping object (1) So that it can treat without supporting in the palm and sliding The grasping section of the hollow semi-sphere configuration which is 55mm in diameter, was made to carry out opening of the maximum direct diameter side, and formed in the front face the a large number book of the ridgeline for **** (17) which can be fabricated with second page metal mold (11), The crevice for impregnation which prepared the inlet (14) which consists of three arc long holes which serve as emission opening of a water solution at equal spacing at the crowning in the condition of having turned down this grasping section (11) on the same radius center circle with a bore [of 25mm], and a depth of 10mm of the bottom of a depression (13), Curvilinear [with a radius of 20mm / small / three / both] is connected with the opening (12) periphery of said grasping section (11) with a large curve with a radius of 65mm, and it is the profile configuration of the conclusion form. The collar (15) in which the upheaval edge (16) which carries out an upper part protrusion along this profile periphery edge was formed is considered as the configuration really formed with the injection-molding means.

[0015] moreover, rubbing member (2) in order to sink in and to make the water solution which demonstrates washing, sterilization, deodorization, antibacterial, and an antifouling operation permeate by the electronic heat emission in the microwave oven interior of a room, it mentioned already -- as -- from a natural fiber or heat-resistant plastic fiber -- changing -- said working-level month grasping object (1) an analog larger 6mm than the profile size of a collar (15) -- it is the configuration manufactured by the **.

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[0017] In addition, a collar (15) and a rubbing member (2) A profile configuration If it is the configuration formed not with the thing limited to the aforementioned conclusion form but with the border line formed by continuation on a curve with a small radius, and a curve with a large radius You may be variant things, such as a gourd configuration besides the polygon of an object configuration. In the front face of the grasping section (11) of said working-level month attachment object Either of the irregularity for direction decision for deciding the support directivity which projects toward a curvilinear part with a small radius is formed. A direction is made to change suitably, without enabling it to recognize directivity, and inspecting visually by the feel of a palm and a finger, while a rubbing part with a small radius or a rubbing part with a large radius works, and it is made to be able to clean to all the corners of the range interior of a room. [0018] Moreover, said rubbing member (2) Working-level month grasping object (1) By receiving and making exchange free, it is a rubbing member (2). The repeat use by washing, and working-level month grasping object (1) Continuous use can be attained, and generating of nonflammable dust can be lessened as much as possible, and a resource can be saved.

[0019] Although illustration was omitted about the exchange means The projection for engagement is formed in the rear face of the collar (15) section, and, on the other hand, it is a rubbing member (2). The slot for engagement is formed in the location where said surface projection for engagement corresponds. A means by which the projection for these engagement and the slot for engagement are partially engaged in adhesives, without using or using it, The rear face and rubbing member (2) of a collar (15) The means and rubbing member (2) which carry out desorption mutually, using partially the velvet fastener in which engagement balking is possible The periphery section is turned up to the upheaval edge (16) side of a collar (15). It is possible to carry out with a means to fasten this clinch section in the stop ring which can fit in free [desorption] to the inside of an upheaval edge (16) etc.

[0020] When adopting the fastening means by said stop ring, it is a rubbing member (2). It is desirable to use what has a thin paper member (it restricts to what has to sink [of a water solution] in and an osmosis function) with an about 2-3mm nonwoven fabric and flexibility etc.

[0021] Next, rubbing member (2) When the water solution made to sink in and permeate is explained, this water solution By the electronic heat emission in the microwave oven interior of a room, washing, sterilization, deodorization, antibacterial, A detergent, an antimicrobial agent, a heat-resistant stain proofing agent, and perfume are mixed in water the place which carries out the maximum exertion of the antifouling operation. Preferably It uses [of food flavors, such as a water solution of alcohol and glycols,] as a detergent whether it is small as perfume instead of a beefsteak plant oil or a deodorant as sorbic acid potassium salt and a deodorant as silicon resin and an antimicrobial agent as a sucrose fatty acid ester and a stain proofing agent for heatproofs.

[0022] When the whole is made into the 100 sections, to the water 93.1 section, the water solution used in this application example is used as a detergent, and as the five sections and a heat-resistant stain proofing agent, sorbic acid potassium salt is mixed as the silicon resin 0.5 section and an antimicrobial agent, and it mixes the 0.5 sections of beefsteak plant oils for a sucrose fatty acid ester as the 0.1 sections and a deodorant.

[0023] In addition, when some change is made, as for number of copies of the above-

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mentioned rate of a compounding ratio, it is also possible it not to limit especially that it is possible to demonstrate the effectiveness of the invention in this application, and it to use dehydroacetic-acid soda, benzoic-acid soda, and other well-known antimicrobial agents as an antimicrobial agent, if it, of course, has the safety to the body and heat in each component.

CLAIMS

[Claim(s)]

[Claim 1] While using as opening (12) with a collar (15) the base of the grasping section (11) of the hollow bulge gestalt formed so that it might grasp in the palm working-level month grasping object (1) which consists of a heat-resistant member which formed the crevice for impregnation (13) in the wall of the grasping section (11) toward the base, and formed in the bottom of this crevice for impregnation (13) the piece or plurality of an inlet (14) which serves as emission opening of a water solution This working-level month grasping object (1) On said base, by the electronic heat emission in the microwave oven interior of a room The water solution which raises any one or two or more operations of washing, sterilization, deodorization, antibacterial, and antifouling is sunk in rubbing member (2) in which at least one side permeated and diffused was formed at the flat surface from -- becoming -- this rubbing member (2) Said working-level month grasping object (1) Microwave oven indoor cleaning implement characterized by enabling joint immobilization of joint immobilization or exchange with a base.

[Claim 2] Working-level month grasping object (1) Microwave oven indoor cleaning implement according to claim 1 characterized by forming an upheaval edge (16) in the top-face periphery edge of a collar (15) while forming a base profile configuration with the border line formed by continuation on a curve with a small radius, and a curve with a large radius.

[Claim 3] Rubbing member (2) Microwave oven indoor cleaning implement according to claim 1 or 2 characterized by making a configuration into the size which are the profile configuration of opening (12) with a collar (15), and the profile configuration of an analog, and does not result on the collar (15) of opening (12) with a collar (15) according to deformation of an edge.